

1. An apparatus for debugging source code, the apparatus comprising:
 - a source code debugger configured to display state information; and
 - at least one initialization routine configured to initialize a target environment to a particular state, the at least one initialization routine corresponding to a target function within a target application.
2. The apparatus of claim 1, further comprising a task dispatcher configured to dispatch the at least one initialization routine in response to an execution request.
3. The apparatus of claim 1, further comprising a function selector configured to generate an execution request in response to selection of the target function by a user.
4. The apparatus of claim 3, wherein the function selector is integrated into the source code debugger.
5. The apparatus of claim 1, wherein the particular state corresponds to an application error.
6. The apparatus of claim 1, further comprising a deployed system configured to dump information used to initialize the target environment to the particular state.
7. The apparatus of claim 1, wherein the at least one initialization routine comprises a function-independent initialization routine and a function-dependent initialization routine.
8. The apparatus of claim 1, wherein the source code debugger is further configured to single step through the target function.

9. A method for debugging source code, the method comprising:
- dispatching at least one initialization routine corresponding to a target function,
 - the at least one initialization routine configured to initialize a target environment to a particular state;
 - dispatching the target function; and
 - displaying state information within a source code debugger.
10. The method of claim 9, further comprising collecting state information from a deployed environment.
11. The method of claim 9, further comprising collecting state information in response to an application error.
12. The method of claim 9, wherein dispatching the at least one initialization routine comprises dispatching a function-independent initialization routine and a function-dependent initialization routine.
13. The method of claim 9, further comprising single stepping through the target function.
14. The method of claim 9, further comprising recompiling kernel-mode code into user-mode code.

15. An apparatus for debugging source code, the apparatus comprising:
- means for dispatching at least one initialization routine corresponding to a target function, the at least one initialization routine configured to initialize a target environment to a particular state;
 - means for dispatching the target function; and
 - means for displaying state information.
16. The apparatus of claim 15, further comprising means for collecting state information from a deployed environment.
17. The apparatus of claim 15, further comprising means for collecting state information in response to an application error.
18. The apparatus of claim 15, further comprising means for single stepping through the target function.
19. A system for debugging source code, the system comprising:
- a target environment comprising a target platform including an operating system and a target application;
 - a source code debugger configured to display state information; and
 - at least one initialization routine configured to initialize the target environment to a particular state, the at least one initialization routine corresponding to a target function within the target application.
20. The system of claim 19, further comprising a deployed system configured to provide information used to initialize the target environment to the particular state.

21. A computer readable storage medium comprising computer readable program code for debugging source code, the program code configured to conduct a method comprising:

enabling selection of a target function;

dispatching at least one initialization routine corresponding to the target function, the at least one initialization routine configured to initialize a target environment to a particular state; and

dispatching the target function.

22. The computer readable storage medium of claim 21, wherein the method further comprises collecting state information from a deployed environment.

23. The computer readable storage medium of claim 21, wherein the method further comprises collecting state information in response to an application error.

24. The computer readable storage medium of claim 21, wherein dispatching the at least one initialization routine comprises dispatching a function-independent initialization route and a function-dependent initialization routine.

25. The computer readable storage medium of claim 21, wherein the method further comprises single stepping through the target function.

26. The computer readable storage medium of claim 21, wherein the method further comprises recompiling kernel-mode code into user-mode code

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